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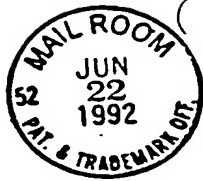
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APPLICATION FOR UNITED STATES PATENT

OF
DOUGLAS A. J. MOCKETT
FOR
GROMMET

TO THE COMMISSIONER OF PATENTS:

Your Petitioner, DOUGLAS A. J. MOCKETT, citizen of the United States of America, and a resident of the County of Los Angeles, State of California, have invented certain new and useful improvement in GROMMET, and I do hereby declare the following to be a full, clear and exact description of the invention, as described and claimed in the following specification.

P2: abstract

BACKGROUND OF THE INVENTION

1
2 Devices for passing a flexible or non-flexible cord, such as
3 a telephone cord or computer cable, through one or more elements
4 such as a desk top, a piece of furniture, a wall or other type of
5 installation are well known. Various devices to do this are known
6 in the art and each of these devices has drawbacks. One device,
7 which is now being used, requires a spring loaded cap which is held
8 in place within a sleeve by the action of the spring. This device
9 is complex, expensive and difficult to use. Other devices consist
10 simply of a cylindrical sleeve in which the hole in the panel or
11 desk must be cut to precisely the exact size or the sleeve will
12 simply fall out, particularly if it is set in a vertical position.
13 If the hole is not cut to the precise size, means must be used to
14 secure the sleeve into the hole.

OBJECTS OF THE INVENTION

15
16 It is an object of the present invention to provide a simpl ,
17 improved device for passing a cable or cord through an aperture in
18 a work surface securing the cord.

19 It is still a further object of the invention to provide a
20 grommet capable of being held easily in a hole cut into a work
21 surface, for passing an electrical cord.

22 Still a further object of the invention is to provide a
23 grommet for holding an electrical cord which can be easily held and
24 used in both a vertical and horizontal position.

25 Still a further object of the invention is to provide a means
26 to close the hole when not in use.

27 These and other objects will be described by reference to the
28 accompanying drawing in which:

1 Fig. 1 is a perspective view of the grommet assembly of the
2 present invention.

3 Fig. 2 is a perspective view of the bottom of the cap portion
4 of the present invention, and

5 Fig. 3 is a side view partially broken away of the cap portion
6 of the grommet of the present invention.

7 Referring now to the drawings, there is shown the sleeve
8 portion 10 of the grommet of the present invention and the cap
9 portion 12. The sleeve portion comprises a cylindrical hollow
10 sleeve 14, and a lip 16 having a larger diameter than sleeve 14.
11 Sleeve 14 optionally has a rib 18 slightly raised from the surface
12 of sleeve 14. The cap portion of the grommet of the present
13 invention comprises a shank portion 20 and a flange or lip portion
14 22. Cut into the cap 12 is an aperture or slot 24 through which
15 will pass the electrical cable 36 which is held by the grommet of
16 the present invention.

17 The shank portion 20 of the cap is of a diameter substantially
18 equal to the inner diameter of the sleeve portion 10 so that the
19 cap frictionally fits and is held in the sleeve portion 10. The
20 flange 22 rests against lip 16.

21 A tab 26 is pivotably attached to the underside 28 of cap 12.
22 Tab 26 is shaped so that it frictionally fits into slot 24. Thus,
23 when no cable is passing through slot 24, tab 26 can be closed so
24 that no opening appears in the cap 12 and it appears to be a solid
25 surface. Tab 26 fits tightly enough frictionally so that it stays
26 in place in slot 24 until pushed down to reopen slot 24.

27 Tab 26 has a connecting arm 30 which has a male connector
28 comprising an elongated cylinder 32 at the end thereof. Cylinder

1 32 snap fits into a female receiver portion 34 which holds cylinder
2 32 yet allows it to pivot. Cylinder 32 can be pulled, with mild
3 force, out of receiver portion 34 so that tab 26 can be separated
4 from cap 12, if desired, and replaced when needed. Thus, this
5 design allows the user to swing tab 26 down and out of the way if
6 desired or it can be removed entirely.

7 Arm 30 is attached under tab 28 creating a step 37. Step 37
8 is necessary to pivot tab 28 so that it is flush with the top
9 surface of cap 12 while arm 30 remains underneath cap 12 and out of
10 the way.

11 In using the device of the present invention, a hole is
12 drilled or cut into the panel, wall, board, desk or work surface 25
13 through which the electrical cable 36 is to pass. The sleeve
14 portion 10 of the present invention is then pressed into place in
15 the hole with rib 18 forming a means for the sleeve portion 10 to
16 be frictionally held in place even if it is in a vertical
17 direction. The rib 18 also provides a means to hold the sleeve in
18 place if the hole has not been drilled precisely to the correct
19 size and is slightly too big. Rib 18 also acts as a dam to hold
20 glue if it is desired to glue sleeve 10 in place.

21 The electrical cable 36 is then passed through the hole in the
22 panel, wall, desk or work surface which now contains sleeve 10, and
23 then cap 12, with tab 26 pivoted down and out of the way, is placed
24 over the cable and pressed into place, so that shank 20
25 frictionally fits into and is held in the inside diameter of the
26 sleeve 10.

27 The aperture 24 that is cut into the cap 12 can be made of a
28 variety of sizes and shapes depending upon the size of the

1 electrical cable to be passed through the grommet or the size of
2 the hole in the desk. Tab 26, of course, must conform to the size
3 and shape of aperture 24.

4 The lip 16 of sleeve portion 10 will rest on the flat portion
5 of the wall, panel, desk or work surface, holding the sleeve
6 portion 10 in place, so that it will not fall through the hole.
7 The rib 18 will prevent the grommet from slipping back and forth
8 within the hole in which it is placed.

9 An additional advantage of the lip 16 and the cap 22 is the
10 fact that when holes are cut into walls or desks there are usually
11 rough edges or chips in the wood, and lip portion 16 will cover
12 these unsightly chips. On steel or metal surfaces, the grommet
13 prevents cutting of the cable by a rough metal edge.

14 Referring specifically to Fig. 3, there is clearly shown a 90
15 degree angle between the sleeve 14 and the lip 16. This 90 degree
16 angle allows the lip 16 to rest on the surface of the work surface.

17 In addition, there is shown a beveled edge 38 on cap 12. The
18 beveled edge 38 not only is aesthetic but will allow the sliding of
19 objects over the top of cap 12 with very little resistance.

20 The grommet of the present invention can be made of any
21 convenient material, such as plastic, metal, or wood, but is
22 preferably made of plastic since it is easiest to produce and also
23 is a non-conductive material in the event of any electrical cables
24 which may have a problem of shorting or shocking a potential user.

25 The grommet of this invention also has the adaptability that
26 the sleeve portion 10 can be used without the cap portion 12 in the
27 event any cable or cables must be passed through the hole that fill
28 the entire inside diameter.

1 In addition, two sleeve portions 10 can be placed back to back
2 to cover both the top and bottom or both sides of a hole in a work
3 surface or wall. Caps 12 can be placed on one or both sides.

4 Having thus described the invention with reference to a
5 preferred embodiment, it will be understood by those skilled in the
6 art the various changes in form and detail may be made therein
7 without departing from the spirit and scope of the invention.

8 I claim:
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